

REMARKS

Claims 1-29 are pending.

Claims 5-8, 18-23, and 28 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Appreciation is expressed for the indication of allowability of these claims.

Claims 1, 4, and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by Samay et al., U.S. Pat. No. 5,276,406 (Samay). Claims 13, 16, 17, and 24 stand rejected under 35 U.S.C. 102(b) over Liu, U.S. Pat. No. 6,236,274 (Liu). Claims 2, 3, 10, and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Samay. Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Samay in view of Yip, U.S. Pat. No. 6,664,871 (Yip). Claims 14, 15, 27, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Liu.

Claim 1

Regarding claim 1, the Office Action has not set for a prima facie case that Samay discloses a low frequency decoupling capacitor coupled to the output of the amplifier at a location between the output of the amplifier and the first terminal of the decoupling capacitor, all as recited in independent claim 1.

Page 2 of the Office Action identifies capacitor C7 as a low frequency decoupling capacitor. However, nowhere in the description of Samay does it state that capacitor C7 is used as a low frequency decoupling capacitor.

If this rejection is to be maintained, Applicants respectfully request the Examiner to provide a basis in fact/or technical reasoning to support that capacitor C7 of Samay is configured as a low frequency decoupling capacitor. See MPEP section 2112, subsection entitled "Examiner Must Provide Rationale Or Evidence Tending To Show Inherency" where it states that the Examiner must provide "a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Accordingly, claim 1 is allowable over Samay.

Claims 2, 3, and 10

Claims 2, 3, and 10 regard the self resonant frequency of the low frequency decoupling capacitor and/or the self resonant frequency of the decoupling capacitor. As page 4 of the Office Action states, these limitations are not taught by Samay.

However, the Office Action states that "It would have been obvious ... to have implemented the specific values of the capacitors, since they are based on routine experimentation to obtain the optimum operating parameters."

Applicants respectfully submit that the features of the self resonant frequencies claimed in claims 2, 3, and 10 would not have been obtained from routine experimentation based on the teachings of Samay. Samay is silent as to the relationships of the self resonant frequencies of capacitors C7 and C8. Furthermore, there is no suggestion to control or set the relationship between self resonant frequencies of capacitors C7 and C8 of Samay. Accordingly, modifying the circuit of Samay to obtain the self resonant characteristics of claims 2, 3, and 10 would involve more than just routine experimentation by one of skill in the art. Accordingly, these claims are allowable over Samay.

Claims 4 and 9

Regarding claims 4 and 9, Samay does not state that capacitor C7 is a tantalum capacitor. Accordingly, claims 4 and 9 are not anticipated by Samay.

Page 2 of the Office Action states that "capacitor C7 in Fig. 1 of Samay et al is functionally equivalent to the claimed tantalum capacitor and ceramic capacitor."

Applicants respectfully contend that even if capacitor C7 is "functionally equivalent" to a tantalum capacitor, that it does not mean that Samay anticipates claim 1 in that Samay does not disclose that capacitor C7 is a tantalum capacitor.

Furthermore, one advantage of using a tantalum capacitor for a low frequency decoupling capacitor is that a tantalum capacitor provides a relatively lower self resonant frequency than a ceramic capacitor of the same capacitance. See paragraph 0025 of the Specification. Because Samay does not disclose these features, Samay can not be used to suggest that C7 is a tantalum capacitor. Accordingly, claims 4 and 9 are allowable over Samay.

Claim 13

Regarding claim 13, the Office Action has not set for a prima facie case that Liu discloses a low frequency decoupling capacitor coupled to the output of the amplifier at a location between the output of the amplifier and the decoupling capacitor, all as recited in independent claim 13.

Page 3 of the office action identifies capacitor 21 of Figure 4 of Liu as a low frequency decoupling capacitor. Liu discloses that capacitor 21 is part of a dual-band harmonic termination circuit 5a used to provide a low impedance at a second harmonic band (e.g. either $2f_H$ or $2f_L$) and a high impedance at the fundamental wave. See Column 6, line 8-15 and Column 7, lines 11-31 of Liu.

However, nowhere in the description of Liu does it state that capacitor 21 is used as a low frequency decoupling capacitor.

If this rejection is to be maintained, Applicants respectfully request the Examiner to provide a basis in fact/or technical reasoning to support that capacitor C21 of Liu is configured as a low frequency decoupling capacitor. See MPEP section 2112, subsection entitled "Examiner Must Provide Rationale Or Evidence Tending To Show Inherency" where it states that the Examiner must provide "a basis in fact and/or technical reasoning to reasonable support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Accordingly, claim 13 is allowable over Liu.

Claim 14, 15, and 27

Claims 14, 15, and 27 regard the self resonant frequency of the low frequency decoupling capacitor and/or the self resonant frequency of the decoupling capacitor. As page 5 of the Office Action states, these limitations are not taught by Liu.

However, the Office Action states that "It would have been obvious ... to have implemented the specific values of the capacitors, since they are based on routine experimentation to obtain the optimum operating parameters."

Applicants respectfully submit that the features of the self resonant frequencies claimed in claims 14, 15, and 27 would not have been obtained from routine experimentation based on the teachings of Liu. Liu is silent as to the relationships of the self resonant frequencies of capacitors 21 and 23. Furthermore, there is no suggestion to control or set the relationship between self resonant frequencies of capacitors 21 and 23 of Liu. Accordingly, modifying the circuit of Liu to obtain the self resonant characteristics of claims 2, 3, and 10 would involve more than just routine experimentation by one of skill in the art. Accordingly, these claims are allowable over Liu.

Claims 16 and 17

Regarding claims 16 and 17, Liu does not state that capacitor 21 is a tantalum capacitor. Accordingly, claims 16 and 17 are not anticipated by Liu.

Page 3 of the Office Action states that "capacitor 21 in Fig. 4 of Liu is functional equivalent to the claimed tantalum capacitor and ceramic capacitor."

Applicants respectfully contend that even if capacitor 21 is "functionally equivalent" to a tantalum capacitor, that it does not mean that Liu anticipates claims 16 and 17 in that Liu does not disclose that capacitor 21 is a tantalum capacitor.

Furthermore, one advantage of using a tantalum capacitor for a low frequency decoupling capacitor is that a tantalum capacitor provides a relatively lower self resonant frequency than a

ceramic capacitor of the same capacitance. See paragraph 0025 of the Specification. Because Liu does not disclose these features, Liu can not be used to suggest that capacitor 21 is a tantalum capacitor. Accordingly, claims 16 and 17 are allowable over Liu.

Claim 24

For reasons similar to those set forth above with respect to claim 13, the Office Action has not set for a prima facie case that Liu discloses a low frequency decoupling capacitor coupled to the output of the amplifier at a location between the output of the amplifier and the first terminal of the decoupling capacitor, all as recited in independent claim 24.

Each dependent claim in this application depends from an independent claim and is therefore allowable for at least this reason.

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079, Freescale Semiconductor, Inc..

Respectfully submitted,

SEND CORRESPONDENCE TO:

Freescale Semiconductor, Inc.
Law Department

Customer Number: 23125

By: 

David G. Dolezal
Attorney of Record

Reg. No.: 41,711

Telephone: (512) 996-6839

Fax No.: (512) 996-6854

Email: David.Dolezal@Freescale.com